STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING									AMENDED R	FORM 3			
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Ute Tribal 18-020							
2. TYPE OF WORK DRILL NEW WELL REENTER P&A WELL DEE				3. FIELD OR WILDCAT ANTELOPE CREEK									
4. TYPE OF WELL Oil Well Coalbed Methane Well: N				5. UNIT or COMMUNITIZATION AGREEMENT NAME						NT NAME			
6. NAME O	F OPERATOR	Oil We			,				7. OPER	ATOR PHON			
8. ADDRES	S OF OPERATOR		PETROGLYPH OPI						9. OPER	ATOR E-MA			
	AL LEASE NUME	BER	, ,	500, Bosie, ID, 8370 11. MINERAL OW		•			12. SUR	FACE OWNE	bwest@pgei.co	m	
(FEDERAL	, INDIAN, OR ST 14-20-	ATE) ·H62-3513		FEDERAL I	NDIAN [STATE (FE	EE 🔵	FEDERA	L INC	DIAN 📵 ST	ATE	FEE 🔵
13. NAME	OF SURFACE OW	/NER (if box 12	= 'fee')						14. SURI	FACE OWNE	R PHONE (if I	oox 12 =	'fee')
15. ADDRE	SS OF SURFACE	OWNER (if box	12 = 'fee')						16. SUR	FACE OWNE	R E-MAIL (if	box 12 =	'fee')
	N ALLOTTEE OR	TRIBE NAME		18. INTEND TO C		LE PRODUCT	TION FR	ом	19. SLAI	NT			
(II DOX 12	= 'INDIAN') Ute In	dian Tribe		YES (Submi	t Commin	gling Applicat	tion) No	0 📵	VERTICA	L DIR	ECTIONAL 📵	HORIZ	ONTAL 🛑
20. LOCA	TION OF WELL		FOC	OTAGES	Q	TR-QTR	SEC	CTION	тои	VNSHIP	RANGE	-	MERIDIAN
LOCATIO	N AT SURFACE		791 FNL	1731 FEL		NWNE		18	5	i.0 S	3.0 W		U
Top of Up	permost Produc	ing Zone	10 FNL	NL 2460 FEL NWNE 18					5	5.0 S	3.0 W		U
At Total D	Pepth		10 FNL	2460 FEL		NWNE		18	5	i.0 S	3.0 W		U
21. COUNT		HESNE		22. DISTANCE TO	NEARES	T LEASE LIN	NE (Feet))	23. NUM	BER OF ACI	RES IN DRILL	ING UNI	Г
				25. DISTANCE TO (Applied For Drill	ing or Co		SAME PO	OOL	26. PRO	POSED DEP MD:	TH 6085 TVD:	6085	
27. ELEVA	TION - GROUND	LEVEL 5987		28. BOND NUMBE		4556					LLING WATER PROVAL NUMB 43-8342		PPLICABLE
				Hole, Casin	g, and C	ement Inf	formati	on					
String	Hole Size	Casing Size		Weight		& Thread		Max Mud		Cement		Yield	Weight
Cond	18	8.625	0 - 40	5.0		nknown 55 ST&C		10.0		Class G Class G	25	1.17	15.8 15.8
Surf Prod	8.75	5.5	0 - 480			55 LT&C	_	10.0		Class G	516	1.17	12.5
1100	0.75	3.3	0 0003	13.3		33 LIGC	_	10.0	,	Class G	338	1.46	13.4
	ļ				ATTACI	HMENTS					1		
	VERIFY THE	FOLLOWING	ARE ATTACHE	ED IN ACCORD	ANCE W	ITH THE U	TAH OI	IL AND G	AS CON	ISERVATIO	ON GENERA	L RULES	5
⊯ WE	LL PLAT OR MAF	PREPARED BY	LICENSED SURV	/EYOR OR ENGIN	EER	✓ COM	1PLETE C	DRILLING	PLAN				
AFF:	IDAVIT OF STAT	US OF SURFACE	OWNER AGREE	EMENT (IF FEE SU	RFACE)	FORI	M 5. IF C	OPERATO	R IS OTH	ER THAN TH	IE LEASE OWI	NER	
DIR DRILLED)	ECTIONAL SURV	YEY PLAN (IF DI	RECTIONALLY C	OR HORIZONTALL	Y	№ торе	OGRAPH	IICAL MAF	•				
NAME Ed	Trotter			TITLE Agen	t	3		PHONE	435 789-	4120			
SIGNATU	RE			DATE 06/01	1/2011			EMAIL 6	edtrotter@	easilink.com	1		
	ber assigned 1350802000	00		APPROVAL				B	*dG	ALLI	ē		
									Permit M	anager			

<u>CONFIDENTIAL</u> EIGHT POINT PLAN

UTE TRIBAL 18-02O NW/NE, SEC. 18, T5S, R3W DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Trona	2562	3462
Mahogany Shale	2712	3315
"B" Marker	3841	2211
"X" Marker	4343	1720
Douglas Creek	4491	1575
"B" Limestone	4886	1189
B/Castle Peak Limestone	5463	625
BSCARB	5884	213
Total Depth	6085	
Anticipated Maximum BHP	1900	

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS FORMATIONS:

Substance	Formation	Depth	Subsea
Oil/Gas	Douglas Creek	4491	1575
Oil/Gas	B/Castle Peak	5463	625

Other mineral zones N/A

3. PRESSURE CONTROL EQUIPMENT: BOP Schematic Diagram attached.

4. CASING PROGRAM:

Hole	Casing	Top – MD	Bottom – MD	Weight lb/ft	Grade	Thread
18"	14"	sfc	40'	steel	cond	none
12 1/4"	8 5/8"	sfc	480'	24.0	J-55	STC
8 3/4"	5 1/2"	sfc	6085'	15.5	J-55	LTC

Casing Str	engths:			Collapse	Burst	Tensile
8 5/8"	24.0 lb.	J-55	STC	1,370 psi	2,950 psi	263,000 lb
5 1/2"	15.5 lb.	J-55	LTC	4,040 psi	4,810 psi	239,000 lb

All casing will be new or inspected.

<u>CONFIDENTIAL</u> EIGHT POINT PLAN

UTE TRIBAL 18-02O NW/NE, SEC. 18, T5S, R3W DUCHESNE COUNTY, UTAH

5. MUD PROGRAM

INTERVAL MUD TYPE Air/Aerated Water

480' – TD Water with DAP or DAP alternative

Gel/polyacrylamide plolymer w/5-10% LCM, LSND as conditions

warrant

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise.

6. CEMENT PROGRAM:

20" Conductor:

Cement to surface with construction cement.

8 5/8" Casing: sfc - 500'

Lead/Tail Slurry: 0' - 500': 220 sks (257 cu ft) Class G cement + 0.25 lblsk

Cello Flake + 2% CaCl₂. Slurry wt: 15.8 ppg, Slurry yield: 1.17 ft³/sk,

Slurry volume: 12-1/4" hole + 30% excess. (Cement will be circulated to surface).

5 1/2" Casing: sfc - 6085'

Lead Slurry: sfc - 4000': 516 sks (986 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR ¹/₄ (Lost Circulation Material) (12.5 PPG±, 1.91 ft³/sk) hole + 30% excess.

Tail Slurry:

4000' - 6085': 322 sx (470 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR ¹/₄ (Lost Circulation Material (13.4 ppg±, 1.46ft³/sk) hole + 30% excess. Cement will be circulated to surface.

7. VARIANCE REQUESTS:

- A. Petroglyph Operating Company, Inc. requests a variance to regulations requiring a straight run blooie line during drilling of surface hole.
- B. Petroglyph Operating Company, Inc. requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line during drilling of surface hole.

<u>CONFIDENTIAL</u> EIGHT POINT PLAN

UTE TRIBAL 18-02O NW/NE, SEC. 18, T5S, R3W DUCHESNE COUNTY, UTAH

- C. Petroglyph Operating Company, Inc. requests a variance to regulations requiring 100' of blooie line discharge from the well head during drilling of surface hole.
- D. Petroglyph Operating Company, Inc. requests a variance to regulations for compressors to be 100' from well head during drilling of surface hole.

8. EVALUATION PROGRAM:

Logs: Platform Express TD to base of surface casing

(DLL, MSFL, CNG, CDL, GR)

Cores: None anticipated DST: None Programmed

Completion: To be submitted at a later date.

9. ABNORMAL CONDITIONS:

None anticipated.

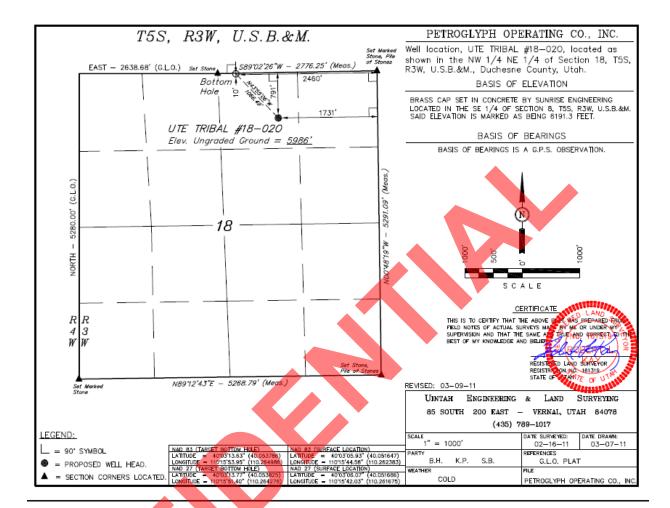
10. STANDARD REQUIRED EQUIPMENT

None Required

11. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

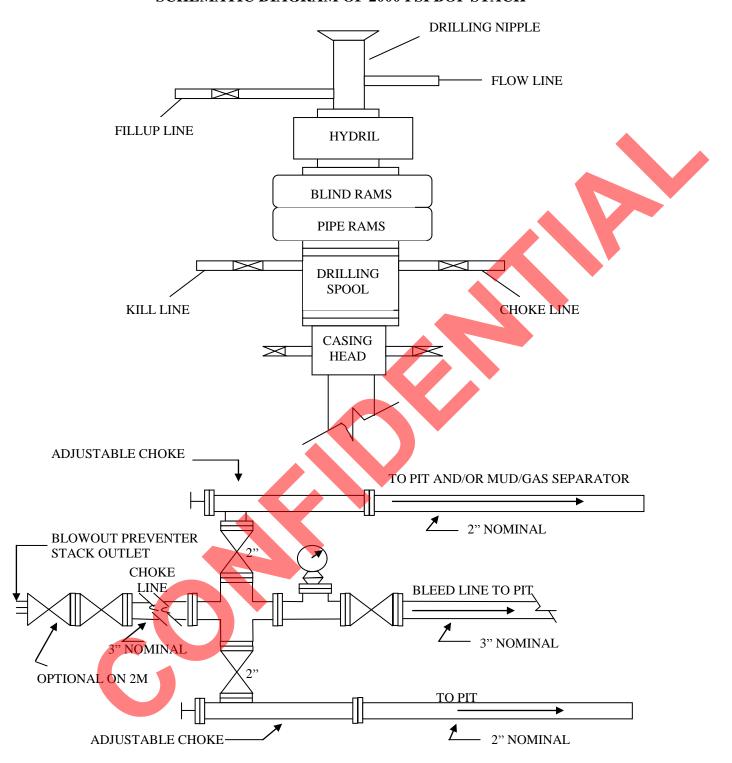
(Attachment: BOP Schematic Diagram)





API Well Number: 43013508020000 Company: Petroglyph Operating Co. Inc. Petroglyph Operating Co. Inc. Project: Duchesne County, UT NAD83 Site: UTE Tribal 18-020 Well: UT 18-02O Scientific Drilling Wellbore: Wellbore #1 Rocky Mountain Operations Azimuths to True North Well Details: UT 18-02O Magnetic North: 11.42° TVD Reference: WELL @ 5986.00ft (Original Well Elev) Ground Level: 0.00 Magnetic Field +N/-S +E/-W Easting Northing Latittude Longitude Strength: 52260.5snT 0.00 0.00 7189933.09 1986846.07 40° 3' 5.930 N 110° 15' 44.580 W Dip Angle: 65.77° Date: 4/7/2011 Model: IGRF2010 -1000 800 -500 UT 18-02O/Plan #1 700 5000 600 UT 18-02O Target 500 South(-)/North(+) (200 ft/in) 1000 1500 300 2000 2000 True Vertical Depth (1000 ft/in) 200 2500 3000 3000 3500 -700 -600 -500 -400 -300 -200 -100 West(-)/East(+) (200 ft/in) 0004 4000 Plan: Plan #1 15:44, April 08 2011 Created By: Janie Cooke 4500 OJECT DETAILS: Duchesne County, UT NAD83 5000 Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Utah Central Zone 5000 System Datum: Mean Sea Level 5500 TD at 6085.12 6000 UT 18-020/Plan # 6000 SECTION DETAILS Dleg 0.00 0.00 +N/-S +E/-W MD **TFace** VSect 1 0.00 2500.00 0.00 0.00 0.00 0.00 0.00 0.00 500.00 UT 18-02O Target 6500 12.06 316.92 1457.87 73.92 316.92 101.20 **6**085.12 12.06 316.92 5976.00 779.12 -728.56 0.00 0.001066.69 UT 18-02O Target 7000 2000 1000 -500 500 1500 Vertical Section at 316.92° (1000 ft/in) RECEIVED: Jun. 07, 2011

SCHEMATIC DIAGRAM OF 2000 PSI BOP STACK



PETROGLYPH OPERATING CO., INC. P.O. BOX 607 ROOSEVELT, UTAH 84066

May 23, 2011

Ms. Diana Mason State of Utah Division of Oil, Gas & Mining 1594 West North Temple, Suite 1210 P.O. Box 145801 Salt Lake City, UT 84114-5801

Re: Directional Drilling R649-3-11

Ute Tribal 18-02O: 791' FNL & 1731' FEL, NW/NE (Surface)

10' FNL & 2460' FEL, NW/NE (Bottom Hole)

Sec.18, T5S, R3W, U.S.B.&M., Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Petroglyph Operating Co., Inc.'s Application for Permit to Drill regarding the above referenced well on May 23, 2011, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The Ute Tribal 18-02O is located within the Antelope Creek Unit Area.
- Petroglyph Operating Co., Inc. is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Petroglyph Operating Co., Inc. will be able to utilize the existing road and pipelines in the area.
- Furthermore, Petroglyph Operating Co., Inc. hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Petroglyph Operating Co., Inc. requests the permit be granted pursuant to R649-3-11.

Respectfully Submitted,

Ed Trotter, Agent P.O. Box 1910 Vernal, UT 84078 Phone: (435)789-4120

Fax: (435)789-1420

E-mail: edtrotter@easilink.com

Certification

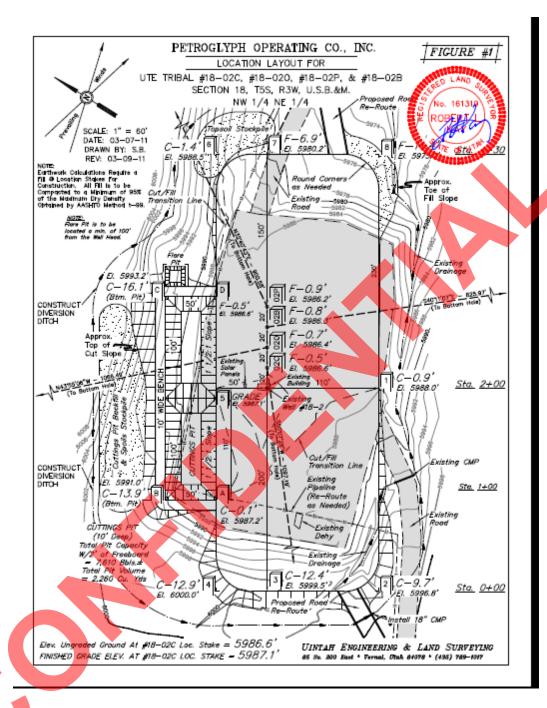
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

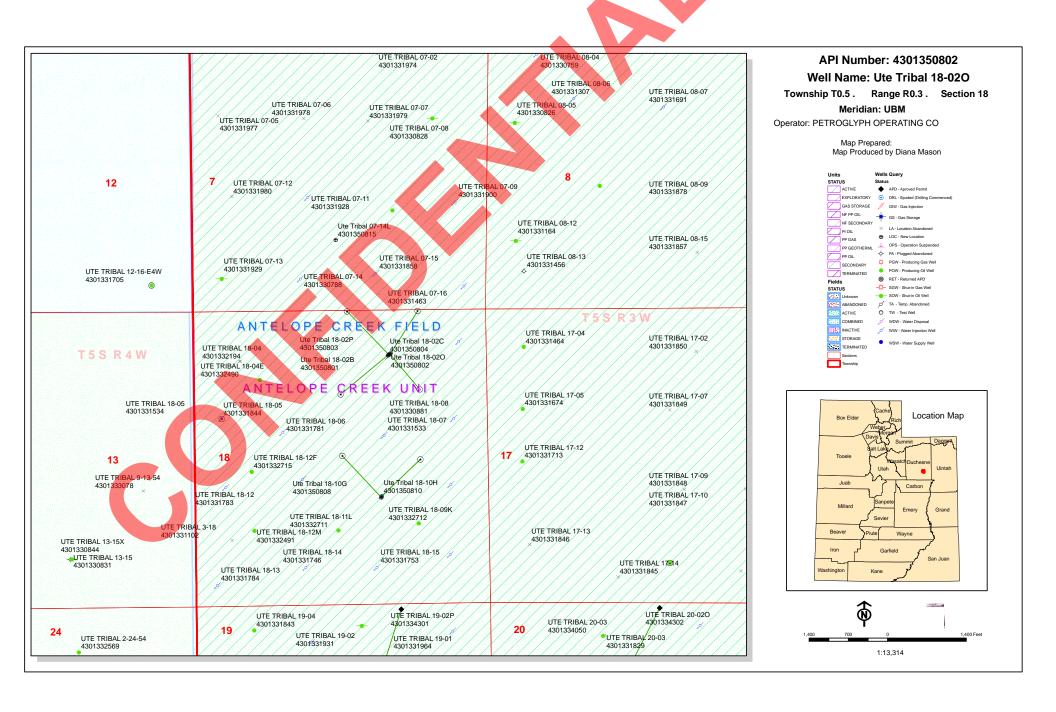
Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the UTE TRIBAL 18-02O Well, located in the NW/NE of Section 18, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3513; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #BO 4556.

Date

Ed Trotter, as Agent for Petroglyph Operating Co., Inc.

Document2 1





WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/1/2011 **API NO. ASSIGNED:** 43013508020000

WELL NAME: Ute Tribal 18-020

OPERATOR: PETROGLYPH OPERATING CO (N3800) **PHONE NUMBER:** 435 789-4120

CONTACT: Ed Trotter

PROPOSED LOCATION: NWNE 18 050S 030W Permit Tech Review:

SURFACE: 0791 FNL 1731 FEL Engineering Review:

BOTTOM: 0010 FNL 2460 FEL Geology Review:

COUNTY: DUCHESNE

LATITUDE: 40.05166

UTM SURF EASTINGS: 562958.00

FIELD NAME: ANTELOPE CREEK

LEASE TYPE: 2 - Indian
LEASE NUMBER: 14-20-H62-3513

SURFACE OWNER: 2 - Indian

PROPOSED PRODUCING FORMATION(S): CASTLE PEAK

COALBED METHANE: NO

LONGITUDE: -110.26191 **NORTHINGS:** 4433541.00

RECEIVED AND/OR REVIEWED:

PLAT

Bond: INDIAN - BO 4556

Potash

Oil Shale 190-5

Oil Shale 190-3

Oil Shale 190-13

✓ Water Permit: 43-8342

RDCC Review:

Fee Surface Agreement

Intent to Commingle

Commingling Approved

LOCATION AND SITING:

R649-2-3.

Unit: ANTELOPE CREEK

R649-3-2. General

R649-3-3. Exception

Drilling Unit

Board Cause No: Cause 214-2

Effective Date: 6/9/2000

Siting: Suspends General Siting

✓ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason

15 - Directional - dmason

API Well No: 43013508020000



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Ute Tribal 18-020 API Well Number: 43013508020000 Lease Number: 14-20-H62-3513

Surface Owner: INDIAN **Approval Date:** 6/7/2011

Issued to:

PETROGLYPH OPERATING CO, 960 Broadway Ave, Ste 500, Bosie, ID 83703

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 214-2. The expected producing formation or pool is the CASTLE PEAK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

 Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available) OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

Reporting Requirements:

API Well No: 43013508020000

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Approved By:

For John Rogers

Associate Director, Oil & Gas

Sundry Number: 23374 API Well Number: 43013508020000

	STATE OF UTAH			FORM 9
ι	DEPARTMENT OF NATURAL RESOU DIVISION OF OIL, GAS, AND N			5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3513
SUNDR	Y NOTICES AND REPORT	S ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
	posals to drill new wells, significant reenter plugged wells, or to drill hori n for such proposals.			7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well				8. WELL NAME and NUMBER: UTE TRIBAL 18-02O
2. NAME OF OPERATOR: PETROGLYPH OPERATING C	50			9. API NUMBER: 43013508020000
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500) , Bosie, ID, 83703		NE NUMBER: 5-7674 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0791 FNL 1731 FEL				COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HP, RANGE, MERIDIAN: 18 Township: 05.0S Range: 03.0W M	/leridian:	U	STATE: UTAH
11. CHECK	K APPROPRIATE BOXES TO INDIC	CATE NA	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	ACIDIZE		LTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	□ c	HANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	□ c	OMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	F	RACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	P	LUG AND ABANDON	PLUG BACK
✓ SPUD REPORT	PRODUCTION START OR RESUME	□ R	ECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud: 2/23/2012	REPERFORATE CURRENT FORMATION	□ s	IDETRACK TO REPAIR WELL	TEMPORARY ABANDON
2/23/2012	TUBING REPAIR	□ v	ENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	□s	I TA STATUS EXTENSION	APD EXTENSION
,	WILDCAT WELL DETERMINATION		TUED	OTHER:
to proper property on			Constitution of the second	<u> </u>
	completed operations. Clearly showell on 2/23/2012. We set			Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 02, 2012
NAME (PLEASE PRINT)	PHONE NUI	MBER	TITLE	
Rodrigo Jurado	435 722-5302		Regulatory & Compliance S	рс
SIGNATURE N/A			DATE 2/27/2012	

RECEIVED: Feb. 27, 2012

Sundry Number: 23390 API Well Number: 43013508020000 FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3513
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	oposals to drill new wells, significantly of reenter plugged wells, or to drill horizor n for such proposals.	deepen existing wells below ntal laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: UTE TRIBAL 18-02O
2. NAME OF OPERATOR: PETROGLYPH OPERATING C	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		9. API NUMBER: 43013508020000
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500), Bosie, ID, 83703 20	PHONE NUMBER: 8 685-7674 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0791 FNL 1731 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 18 Township: 05.0S Range: 03.0W Meri	dian: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
4/15/2012	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
			✓ WATER DISPOSAL
	TUBING REPAIR	VENT OR FLARE	
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
All produced water water injection patentions are located T5S, R3W Duches T5S, R3W Duches 34,	completed operations. Clearly show a er will be trucked or pumped pump station for injection. We at the following: Ute Tribal 2 ne County, Utah Ute Tribal 18 ne County, Utah Ute Tribal 34, T4S, R3W Duchesne County	through pipeline to a Vater injection pump 1-11 NESW Section 21, 3-08 SENE Section 18, 4-12D3 NWSW Section v, Utah	Accepted by the Utah Division of
NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBI 435 722-5302	ER TITLE Regulatory & Compliance S	Spc
SIGNATURE		DATE 2/29/2012	
N/A		2/28/2012	

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Cor	mpany;	PETRO	<u>GLYPI</u>	H OPERA	TING CO	MPANY	
Well Name	:	U'	TE TRII	BAL 18-02	O		
Api No:	43-013-508	802	Lea	se Type	IND	IAN	
Section_18	Township_	05S	_Range_	03W	County	DUCHESNE	
Drilling Cor	ntractor				R	G#	
SPUDDE	D:						
	Date	02/23/2	012				
	Time						
	How	DRY		_ _			
Drilling wi Commend	ill :e:						
Reported by		G	ENO R	OLAND			
Telephone #		(9	970) 361 ₋	-3271			
Date	02/29 /2012	Signe	ed	СНО			

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT RIVE

14-20-H62-3513

APPLICATION FOR PERMI	,		ndian, Allottee o	
1a. Type of Work: X DRILL 1b. Type of Well: X Oil Well Gas Well Other	REENTER Single Zone	8. Lea	Jnit or CA Agree -20-H62-46 ase Name and We TE TRIBA	ell No.
2. Name of Operator PETROGLYPH OPERATING CO., I	NC. CONFIDENTIAL	!	I Well No.	3 · 5080 7
3a. Address P.O. BOX 1910 VERNAL, UT 84078	3b. Phone No. (Include area code) (435)789-4120	10. Field	and Pool, or Expl	loratory
At surface 791' FNL, 1731' FEL, NW/Bottom Hole: 10' FNL, 2460' FEL, NW/At proposed prod. Zone	NE, Sec. 18, T5S, R3W		T., R., M., or Blk EC. 18, T5. S.B.&M.	k. and Survey or Area S, R3W,
14. Distance in miles and direction from nearest town or post of 17.4 MILES SOUTHWEST OF M	fice* YTON, UTAH		y or Parish UCHESNE	13. State UTAH
15. Distance from proposed* location to nearest 7916 property or lease line, ft. (Also to nearest drig. Unit line, if any)	16. No. of Acres in lease 640	17. Spacing Unit dea		
18. Distance from proposed location* to nearest well, drilling, completed, See Topo applied for, on this lease, ft. Map "C"	19. Proposed Depth 6085' TMD 5976' TVD	20. BLM/BIA Bond BO 455		W
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5987.1 FEET GRADED GROUND	22. Approximate date work will start* UPON APPROVAL		ted duration DAYS	
The following, completed in accordance with the requirem 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Fores SUPO shall be filed with the appropriate Forest Service	Bond to cover the (see Item 20 at t System Lands, the 5. Operator, certificate	operations unless covove).	ered by an existir	
25. Signature Coll' rett	Name (Printed/Typed) Ed Trotter	RECEIVED	i	y 23, 2011
Title Agent		FEB 2 8 2012		
Approved by (Signature)	Name (Printed/Typed) Jerry Kencz	OF OIL, GAS & MIN !ka	ř .	EB 2 1 2012
Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELI			
Application approval does not warrant or certify that the applicar conduct operations thereon. Conditions of Approval, if any, are attached.	nt holds legal or equitable title to those right	s in the subject lease v	hich would entit	le the applicant to

*(Contiued on page 2)

1155064/A

NOTICE OF APPROVAL

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to m

United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

mc 4/20/11

nt or agency of the

CONDITIONS OF APPROVAL ATTACHED



UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE** 170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

API No:

Petroglyph Operating Co., Inc.

Ute Tribal 18-020

43-013-50802

Location:

NWNE, Sec. 18, T5S, R3W

Lease No: 14-20-H62-3513

Agreement:

Antelope Creek Agreement

OFFICE NUMBER:

(435) 781-4400

OFFICE FAX NUMBER:

(435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	_	- Forty-Eight (48) hours prior to construction of location an access roads.				
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.				
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.				
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov				
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	_	Twenty-Four (24) hours prior to initiating pressure tests.				
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.				

Page 2 of 7 Well: Ute Tribal 18-02O

2/17/2012

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO_x per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO_x per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
 work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
 mitigation may be necessary for the discovered paleontologic material before construction can
 continue.

SITE SPECIFIC COA's

Additional Stipulations:

- 1) All areas of disturbance (including surface pipelines) must have appropriate surface use agreements or approvals in place with the proper owner and/or agency before such action is started.
- 2) The conditions as set forth by those owners and/or agencies.

General Conditions of Approval:

- A <u>30</u>° foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department and the BLM will be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.

Page 3 of 7 Well: Ute Tribal 18-020 2/17/2012

- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel will refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department will be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

Page 4 of 7 Well: Ute Tribal 18-02O

2/17/2012

DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- Production casing cement shall be brought up and into the surface.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored" Blooie line can be 75 feet.
 All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
 encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
 Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

Page 5 of 7 Well: Ute Tribal 18-02O 2/17/2012

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
 Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM_UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well: Ute Tribal 18-020 2/17/2012

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
 notified when it is placed in a producing status. Such notification will be by written communication
 and must be received in this office by not later than the fifth business day following the date on
 which the well is placed on production. The notification shall provide, as a minimum, the following
 informational items:
 - o Operator name, address, and telephone number.
 - Well name and number.
 - o Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - o Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be
 reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported
 verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will
 be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of
 Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

Page 7 of 7 Well: Ute Tribal 18-020 2/17/2012

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

 All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
 lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
 suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
 obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
 equipment shall be removed from a well to be placed in a suspended status without prior approval
 of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
 approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
 of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Operator: Petroglyph Operating Company Operator Account Number: N 3800 Address: P.O. Box 607 City Roosevelt State UT Zip 84066 Phone Number: (435) 722-2531

Well 1

API Number	Well	Name	QQ	Sec	Twp	Rng	County	
4301350804	4301350804 Ute Tribal 18-02C		NWNE	18	58	3W		
Action Code	Current Entity Number	New Entity Number	s	pud Da	lo io	Entity Assignment Effective Date		
В	9999 C)	12245	2	/23/201	2	Constitution of the Consti	3/1/2012	
Comments:	BHI SUN				-	JUNE		

Well 2

18-020	NWNE	18	Twp 5S	Rng	County	
			1 20	3W	Duchesne	
Entity New Entity ber Number	S	Spud Date		Entity Assignment Effective Date		
99 12245	2	/23/201	2		3/1/2012	
		99 12245 2	99 12245 2/23/201	99 12245 2/23/2012	99 12245 2/23/2012	

Well 3

API Number	Well	QQ	Sec	Twp	Rng	ing County	
430135080	Ute Tribal 18-02B	Ute Tribal 18-02B		18	5S	3W Duchesne	
Action Code	Current Entity Number	New Entity Number	Spud Date 2/24/2012		Entity Assignment Effective Date 3/1/2012		
В	99990	12245					
Comments:	BHL Seno	3120 IROIZ CONFIDENTIAL					

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

RECEIVED

Rodrigo Jurado

Name (Please Print)

Title

Signature

Regulatory Compliance Spc

2/28/2012

RF

FEB 2 8 2012

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING 5.LEASE DESIGNATION AND 14-20-H62-3513	FORM 9				
	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER:				
SUNDRY NOTICES AND REPORTS ON WELLS 6. IF INDIAN, ALLOTTEE OR UTE	TRIBE NAME:				
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 7.UNIT or CA AGREEMENT I ANTELOPE CREEK	7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK				
1. TYPE OF WELL Oil Well UTE TRIBAL 18-020	:				
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO 9. API NUMBER: 43013508020000					
3. ADDRESS OF OPERATOR: PHONE NUMBER: 9. FIELD and POOL or WILD 960 Broadway Ave, Ste 500, Bosie, ID, 83703 208 685-7674 Ext ANTELOPE CREEK	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0791 FNL 1731 FEL COUNTY: DUCHESNE	1				
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 18 Township: 05.0S Range: 03.0W Meridian: U UTAH	1 -				
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION TYPE OF ACTION					
☐ ACIDIZE ☐ ALTER CASING ☐ CASING REPAIR					
NOTICE OF INTENT Approximate date work will start: CHANGE TO PREVIOUS PLANS CHANGE TUBING CHANGE TUBING CHANGE WELL NAME					
☐ CHANGE WELL STATUS ☐ COMMINGLE PRODUCING FORMATIONS ☐ CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion: DEEPEN DEEPEN DEEPEN DEEPEN DEEPEN DEEPEN NEW CONSTRUCTION					
2/23/2012					
SPUD REPORT PRODUCTION START OR RESUME RECLAMATION OF WELL SITE RECOMPLETE DIFFERENT	FORMATION				
Date of Spud: REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARY ABANDON					
U TUBING REPAIR U VENT OR FLARE WATER DISPOSAL					
DRILLING REPORT Report Date: SI TA STATUS EXTENSION APD EXTENSION					
	d Chaoinal				
-	a Spacing				
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. In order to facilitate the available drill rig, Petroglyph Operating has increased the well head spacing from 20' to 23' between the well referenced above and others on the same location. This well is One of Oil, Gas and N	n of				
Four boing drilled on an existing well and. The original appealing did not	_				
provide enough room for the drilling rig we have hired to drill these	112				
wells for us. The revised spacing will not require us to disturb any By:	APAK				
additional surface area. The new location of the well head is the	22				
following: 788'FNL, 1726'FEL NWNE Sec. 18, T5S, R3W Duchesne					
County, Utah. Pleas see the attached revised plats.					
NAME (PLEASE PRINT) PHONE NUMBER TITLE					
Rodrigo Jurado PHONE NUMBER Regulatory & Compliance Spc					
SIGNATURE N/A 4/3/2012					

Sundry Number: 24396 API Well Number: 43013508020000

PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #18-02C, #18-02O, #18-02P & #18-02B

LOCATED IN DUCHESNE COUNTY, UTAH SECTION 18, T5S, R3W, U.S.B.&M.



PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: SOUTHEASTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ROAD RE-ROUTE

CAMERA ANGLE: SOUTHWESTERLY



LOCATION	O2 22 MONTH DAY		11 YEAR	рното
TAKEN BY: B.H.	DRAWN BY: S.F.		/ISED:0	

24396 API Well Number: 43013508020000 Sundry Number: \triangleright (Not Set on Ground) Used Bearing Tree Position Re-Establishea <u>EGEND:</u> II II RE-ESTABLISHED. (Not Set on Ground.) NOO°47'35"W -SECTION CORNERS PROPOSED WELL HEAD. 90° SYMBOL SECTION CORNERS LOCATED NOO°40'22"W - 2641.06' (Meas.) 2637.34' 4 \mathcal{R} (Meas. ₹3₽ Set Marked Stone Set Stone S89°06'39"W - 2485.89' (Meas.) Elev. Ungraded Ground LNE H NAD 83 (TARGET BOTTOM HOLE)

LATITUDE = 40°02′59.73′ (40.049925)

LONGITUDE = 110°15′37.61″ (110.260447)

NAD 27 (TARGET BOTTOM HOLE)

LATITUDE = 40°02′59.83″ (40.049964) N89°12'43"E $_{0}$ ONGITUDE = 110°15'35.06" S39°34'03"E R3W, BEARING Set Stone #18-02B TABLE ١ ω 5268.79' (Meas. II U.S.B.&M5988' S89°02'26"W -824.56 LENGTH (110.259739)776 | NAD 83 (SURFACE LOCATION) | LATITUDE = 40.03'06.08" (40.051689) | LONGITUDE = 110'15'44.26" (110.262294) | NAD 27 (SURFACE LOCATION) | LATITUDE = 40'03'06.22" (40.051728) Ŷ LATITUDE = $40^{\circ}03'06.22''$ (40.051728) LONGITUDE = $110^{\circ}15'41.71''$ (110.261586) 2776.25' (Meas.) 1420 Ho/e **Bottom** 1706 1190' Set Stone, Pile of Stones Set Marked Stone, Pile of Stones N00°48'19"W -5291.09' (Meas.) REV: 03-22-12 Z.L. REVISED: 03-09-11 shown in the NW 1/4 NE 1/4 of Section R3W, U.S.B.&M., Duchesne County, Utah. PARTY Well location, UTE TRIBAL SCALE WEATHER LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, SAID ELEVATION IS MARKED AS BEING 6191.3 FEET. BRASS CAP , UINTAH 85 SOUTH PETROGLYPH OPERATING В.H. COLD BASIS THIS IS TO CERTIFY THAT THE ABOVE PAY WAS PREPARED PRIFICED NOTES OF ACTUAL SURVEYS MAKE BY WE OR UNDER MY SUPERVISION AND THAT THE SAME AND TRUTH MAD 160 PREST OF MY KNOWLEDGE AND BELIEF MY 1000 Х.Р. SET IN CONCRETE BY SUNRISE ENGINEERING 읶 1000 ENGINEERING 200 EAST BEARINGS BASIS OF BASIS Ś j 500' (435) 789–1017 S 윾 \circ IS A G.P.S. OBSERVATION CERTIFICATE > _ **ELEVATION** BEARINGS #18-02B, located DATE SURVEYED: REFERENCES ጵ PETROGLYPH OPERATING CO., REGISTIONED LAND SURVEYOR STATE OF REGISTR VERNAL, 02-16-11 Ш G.L.O. LAND ON NO. 161319 PLAT UTAH 84078 TAMAZE OF3U CO., R3W, U.S.B.&M 1000 SURVEYING DATE DRAWN: 03-07-11 ₫ INC. Sinnun as T5S, 3 NC. ОВ

24396 API Well Number: 43013508020000 Sundry Number: \triangleright (Not Set on Ground) Used Bearing Tree Position Re-Establishea <u>EGEND:</u> II II RE-ESTABLISHED. (Not Set on Ground.) NOO°47'35"W -SECTION CORNERS PROPOSED WELL HEAD 90° SYMBOL SECTION CORNERS LOCATED. NOO°40'22"W - 2641.06' (Meas.) 2637.34' 4 \mathcal{R} (Meas. ₹3₽ Set Marked Stone Set Stone S89°06'39"W - 2485.89' (Meas.) Elev. Ungraded Ground TRIBAL #18-02C NAD 83 (TARGET BOTTOM HOLE) LATITUDE = 40'02'59.00" (40.049722) LONGITUDE = 110'15'55.75" (110.265486) NAD 27 (TARGET BOTTOM HOLE) LATITUDE = 40'02'59.14" (40.049761) N89°12′43″E _ONGITUDE = 110°15'53.20" (110.264778) R3W, Set Stone 1 8 Hole **Bottom** 5268.79' (Meas., IJ 1490 U.S.B.&M5987 S89°02'26"W -800 NAD 83 (SURFACE LOCATION)

LATITUDE = 40'03'05.84" (40.051622)

LONGITUDE = 110'15'44.76" (110.262433)

NAD 27 (SURFACE LOCATION)

LATITUDE = 40'03'05.98" (40.051661) LATITUDE = $40^{\circ}03^{\circ}05.98^{\circ}$ (40.051661) LONGITUDE = $110^{\circ}15^{\circ}42.21^{\circ}$ (110.261725) 2600' 2776.25' (Meas.) 1746 Set Stone, Pile of Stones Set Marked Stone, Pile of Stones N00°48'19"W -5291.09' (Meas.) REV: 03-22-12 Z.L. REVISED: 03-09-11 shown in the NW 1/4 NE 1/4 of Section R3W, U.S.B.&M., Duchesne County, Utah. PARTY Well location, UTE TRIBAL SCALE WEATHER LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, SAID ELEVATION IS MARKED AS BEING 6191.3 FEET. BRASS CAP , UINTAH 85 SOUTH PETROGLYPH OPERATING В.H. COLD BASIS 1000 Х.Р. SET IN CONCRETE BY SUNRISE ENGINEERING 읶 1000 ENGINEERING 200 EAST BEARINGS BASIS OF BASIS Ś j 500' (435) 789–1017 S 유 C IS A G.P.S. OBSERVATION CERTIFICATE > _ **ELEVATION** BEARINGS #18-02C, located DATE SURVEYED: REFERENCES ጵ PETROGLYPH OPERATING CO., REGISTIONED LAND SURVEYOR STATE OF REGISTR VERNAL, 02-16-11 Ш G.L.O. LAND ON NO. 161319 PLAT UTAH 84078 TAMAZE OF3U CO., R3W, U.S.B.&M 1000 SURVEYING DATE DRAWN: 03-07-11 j ∞ INC. Silinu) as T5S, 3 NC. 4 OR

24396 API Well Number: 43013508020000 Sundry Number: \triangleright (Not Set on Ground) Used Bearing Tree Position Re-Establishea <u>EGEND:</u> II II RE-ESTABLISHED. (Not Set on Ground.) NOO°47'35"W -SECTION CORNERS PROPOSED WELL HEAD 90° SYMBOL SECTION CORNERS LOCATED. NOO°40'22"W - 2641.06' (Meas.) 2637.34' 4 \mathcal{R} (Meas. ₹3₽ Set Marked Stone Set Stone S89.06.39"W - 2485.89' (Meas., NAD 83 (TARGET BOTTOM HOLE)

LATITUDE = 40°03′13.63° (40.053786)

LONGITUDE = 110°15′53.95″ (110.264986)

NAD 27 (TARGET BOTTOM HOLE)

LATITUDE = 40°03′13.77″ (40.053825) Elev. N89°12′43″E _ONGITUDE = 110"15'51.40" R3W, U.S.B.&MUngraded TRIBAL Ho/e Bottom 1 8 5268.79' (Meas., 10 #18-020 Ground = S89°02'26"W -98,1901 W. 13.00.21. 4VN (110.264278) 788 5988 NAD 83 (SURFACE LOCATION)

LATITUDE = 40°03'05.96" (40.051656)

LONGITUDE = 110°15'44.51" (110.262364)

NAD 27 (SURFACE LOCATION)

LATITUDE = 40°03'06.10" (40.051694) LATITUDE = $40^{\circ}03'06.10''$ (40.051694) LONGITUDE = $110^{\circ}15'41.96''$ (110.261656) 2776.25' (Meas., 2460 Set Stone, Pile of Stones Set Marked Stone, Pile of Stones N00°48'19"W - 5291.09' (Meas.) REV: 03-22-12 Z.L. REVISED: 03-09-11 shown in the NW 1/4 NE 1/4 of Section R3W, U.S.B.&M., Duchesne County, Utah. Well location, UTE TRIBAL PARTY SCALE WEATHER LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, SAID ELEVATION IS MARKED AS BEING 6191.3 FEET. BRASS CAP , UINTAH 85 SOUTH PETROGLYPH OPERATING В.H. COLD BASIS 1000 THIS IS TO CERTIFY THAT THE ABOVE PART, WAS PREPARED BY FIELD NOTES OF ACTUAL SURVEYS MADE BY WE OR UNDER MY BEST OF MY KNOWLEDGE AND BELIEF SUPERVISION AND THAT THE SAME AND THE THE NAME OF THE PARTY OF THE PAR Х.Р. SET IN CONCRETE BY SUNRISE ENGINEERING 읶 1000 ENGINEERING 200 EAST BEARINGS BASIS OF BASIS Ś j 500' (435) 789–1017 S 유 IS A G.P.S. OBSERVATION \circ CERTIFICATE > _ **ELEVATION** BEARINGS #18-020, located DATE SURVEYED: REFERENCES ጵ PETROGLYPH OPERATING CO., INC. REGISTIONED LAND SURVEYOR STATE OF REGISTR VERNAL, 02-16-11 Ш G.L.O. LAND ON NO. 161319 PLAT UTAH 84078 TAMAZE OF3U CO., R3W, U.S.B.&M 1000 SURVEYING DATE DRAWN: 03-07-11 ₫ INC. Silinu) as T5S, 3 ОВ

24396 API Well Number: 43013508020000 Sundry Number: \triangleright (Not Set on Ground) Used Bearing Tree Position Re-Establishea <u>EGEND:</u> II II RE-ESTABLISHED. (Not Set on Ground.) NOO°47'35"W -SECTION CORNERS PROPOSED WELL HEAD 90° SYMBOL SECTION CORNERS LOCATED NOO°40'22"W - 2641.06' (Meas.) 2637.34' 4 \mathcal{R} (Meas. ₹3₽ Set Marked Stone Set Stone S89°06'39"W - 2485.89' (Meas.) Elev. Ungraded Ground = TRIBAL N32°22'30"E BEARING NAD 83 (TARGET BOTTOM HOLE)

LATITUDE = 40°03′13.56″ (40.053767)

LONGITUDE = 110°15′37.75″ (110.260486)

NAD 27 (TARGET BOTTOM HOLE)

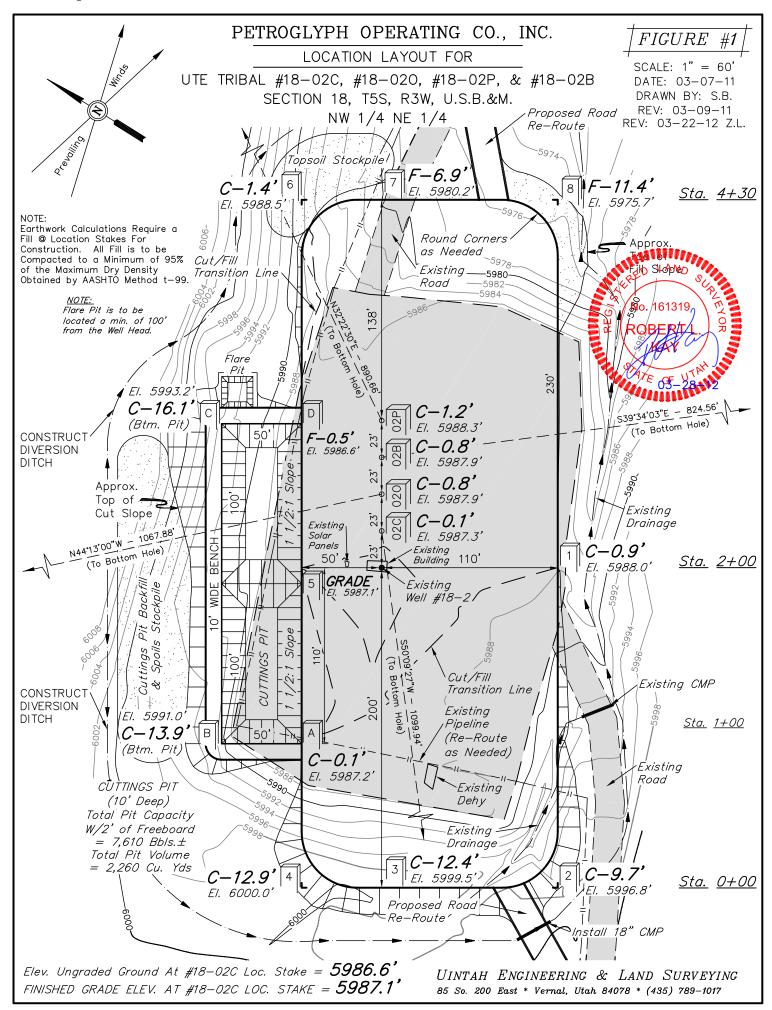
LATITUDE = 40°03′13.70″ (40.053806) LINE TABLE N89°12'43"E $_{0}$ ONGITUDE = 110°15'35.20" R3W, Set Stone #18-02P 1 8 890.66 _ENGTH 5268.79' (Meas., U.S.B.&M5988' 2776.25' (Meas., S89°02'26"W -(110.259778)764 NAD 83 (SURFACE LOCATION)

LATITUDE = 40°03'06.20" (40.051722)

LONGITUDE = 110°15'44.01" (110.262225)

NAD 27 (SURFACE LOCATION)

LATITUDE = 40°03'06.34" (40.051761) LATITUDE = $40^{\circ}03^{\circ}06.34^{\circ}$ (40.051761) LONGITUDE = $110^{\circ}15^{\circ}41.46^{\circ}$ (110.261517) 20' Ho/e 1687 **Bottom** 1200 Set Stone, Pile of Stones Set Marked Stone, Pile of Stones N00°48'19"W - 5291.09' (Meas.) REV: 03-22-12 Z.L. REVISED: 03-09-11 R3W, U.S.B.&M., Duchesne County, Utah. shown in the NW 1/4 NE 1/4 of Section PARTY Well location, UTE TRIBAL SCALE WEATHER LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, SAID ELEVATION IS MARKED AS BEING 6191.3 FEET. BRASS CAP , UINTAH 85 SOUTH PETROGLYPH OPERATING В.H. COLD BASIS THIS IS TO CERTIFY THAT THE ABOVE PAY WAS PREPARED PRIFICED NOTES OF ACTUAL SURVEYS MAKE BY WE OR UNDER MY SUPERVISION AND THAT THE SAME AND TRUTH MAD 160 PREST OF MY KNOWLEDGE AND BELIEF MY 1000 Х.Р. SET IN CONCRETE BY SUNRISE ENGINEERING 얶 1000 ENGINEERING 200 EAST BEARINGS IS A G.P.S. OBSERVATION BASIS OF BASIS Ś j 500' (435) 789–1017 S 유 \circ CERTIFICATE > _ **ELEVATION** BEARINGS #18-02P, located DATE SURVEYED: REFERENCES ጵ PETROGLYPH OPERATING CO., REGISTIONED LAND SURVEYOR STATE OF REGISTRA VERNAL, 02-16-11 Ш G.L.O. LAND ON NO. 161319 PLAT UTAH 84078 TAMYE OF3U CO., R3W, U.S.B.&M 1000 SURVEYING DATE DRAWN: 03-07-11 ₫ INC. Silvino) as T5S, 3 NC. ОВ



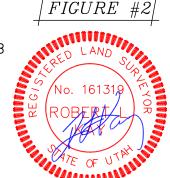
Sundry Number: 24396 API Well Number: 43013508020000

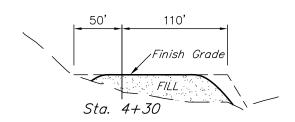
X-Section Scale 1" = 100' DATE: 03-07-11 DRAWN BY: S.B.

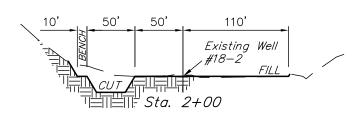
PETROGLYPH OPERATING CO., INC.

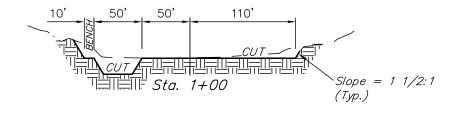
TYPICAL CROSS SECTIONS FOR

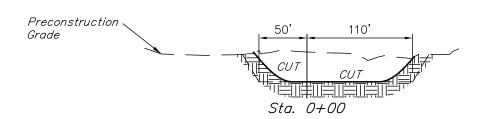
UTE TRIBAL #18-02C, #18-02O, #18-02P, & #18-02B SECTION 18, T5S, R3W, U.S.B.&M. NW 1/4 NE 1/4











APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = \pm 3.772 ACRES ACCESS ROAD DISTURBANCE = \pm 0.040 ACRES

 $TOTAL = \pm 3.812 ACRES$

* NOTE: FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(12") Topsoil Stripping = 1,020 Cu. Yds.

(New Construction Only)

Remaining Location = 6,980 Cu. Yds.

TOTAL CUT = 8,000 CU.YDS. FILL = 4,200 CU.YDS. EXCESS MATERIAL = 3,800 Cu. Yds.
Topsoil & Pit Backfill = 2,150 Cu. Yds.

(1/2 Pit Vol.)

EXCESS UNBALANCE = 1,650 Cu. Yds. (After Interim Rehabilitation)

(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

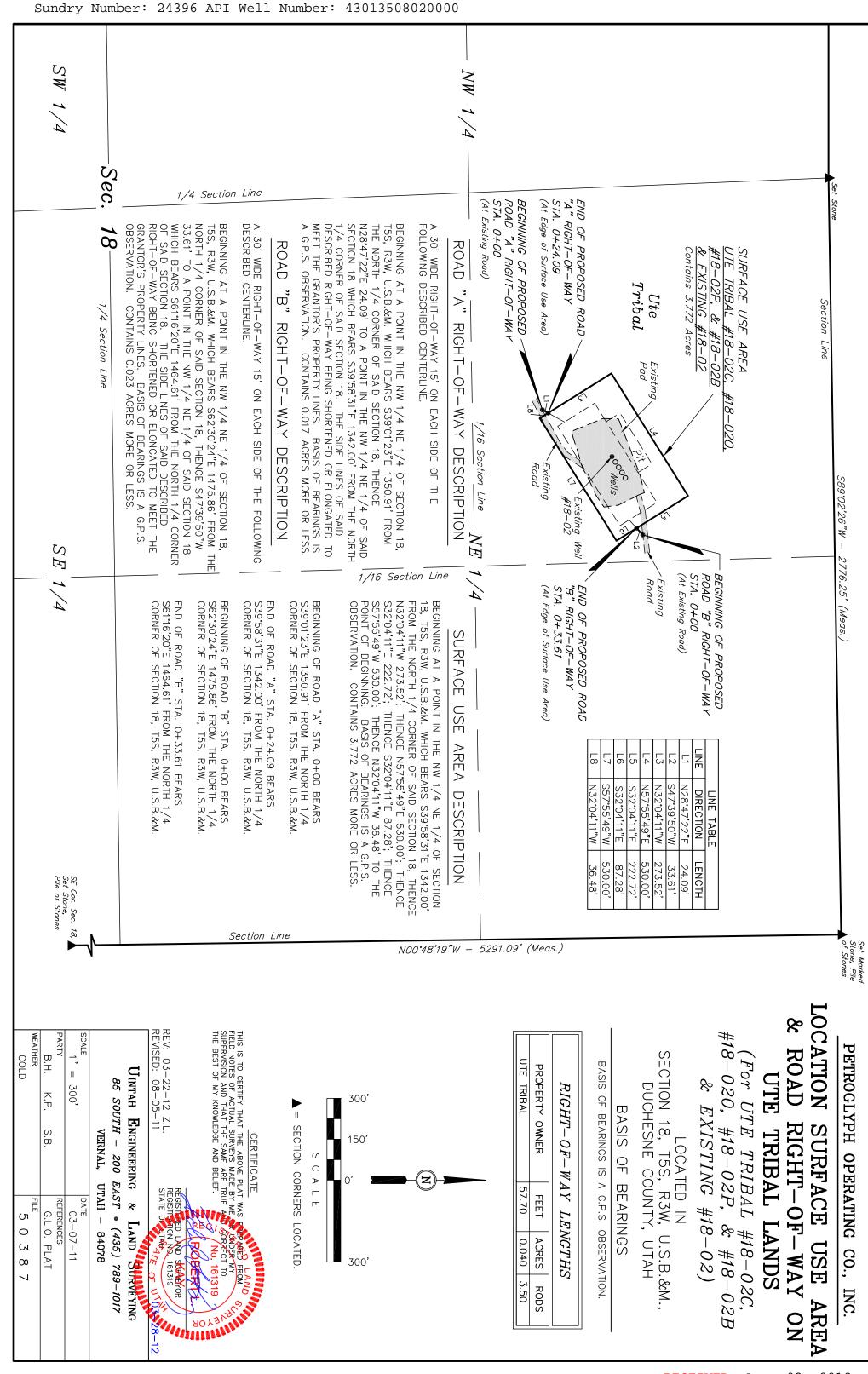
Sundry Number: 24396 API Well Number: 43013508020000 PETROGLYPH OPERATING CO., INC. *FIGURE* TYPICAL RIG LAYOUT FOR SCALE: 1" = 60UTE TRIBAL #18-02C, #18-02O, #18-02P, & #18-02B DATE: 03-07-11 SECTION 18, T5S, R3W, U.S.B.&M. DRAWN BY: S.B. REV: 03-22-12 Z.L. Access Road NW 1/4 NE 1/4 No. 161319 <u>NOTE:</u> Flare Pit is to be DATA located a min. of 100' from the Well Head. Flare 50' PIPE RACKS 00 DOG HOUSE 110' 23, 50' RIG TRAILER WATER PIT S PUMP TOILET 🗌 CUTTINGS 110 00. MUD SHED HOPPER POWER 50' TOOLS FUEL CUTTINGS PIT

(10' Deep) Total Pit Capacity W/2' of Freeboard

= 7,610 Bb/s. \pm

Total Pit Volume = 2,260 Cu. Yds

STORAGE **TANK** Access Road UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017 RECEIVED: Apr. 03, 2012



PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #18-02C,

#18-020, #18-02P, & #18-02B

& EXISTING #18-02

ROAD RIGHT-OF-WAY & SURFACE USE AREA

SECTION 18, T5S, R3W, U.S.B.&M.

TOTAL ROAD RIGHT-OF-WAY ON UTE TRIBAL LANDS

TOTAL LENGTH OF RIGHT-OF-WAY IS 57.70' OR 0.011 MILES. WIDTH OF RIGHT-OF-WAY IS 30' (15' PERPENDICULAR ON EACH SIDE OF THE CENTERLINE). CONTAINS 0.040 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF UTAH) SS COUNTY OF UINTAH)

ROBERT L. KAY, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR PETROGLYPH OPERATING CO., INC., THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER THE EXPERVISION): THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE SURFACE USE AREA OF ROAD, RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARE TO THE SURVEYS OF THE SURVEYS OF THE SURFACE USE AREA OF ROAD, ROAD, RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP WAS PREPARE TO THE SURVEYS OF THE SURVEYS

ACKNOWLEDGEMENT

	SUBSCRIBED	AND	SWORN	BEFORE	ME	THIS	DAY O)F		_2012.	
MY COMMISSION	EXPIRES										
	2,11 11 (29								NOTARY PL	JBLIC	

APPLICANT'S CERTIFICATE

I,______, DO HEREBY CERTIFY THAT I AM THE AGENT FOR PETROGLYPH OPERATING CO., INC., HEREINAFTER DESIGNATED THE APPLICANT; THAT ROBERT L. KAY WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS SURFACE USE AREA AND ROAD RIGHT-OF-WAY, 0.011 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN, THAT SAID SURFACE USE AREA AND ROAD RIGHT-OF-WAY ARE ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

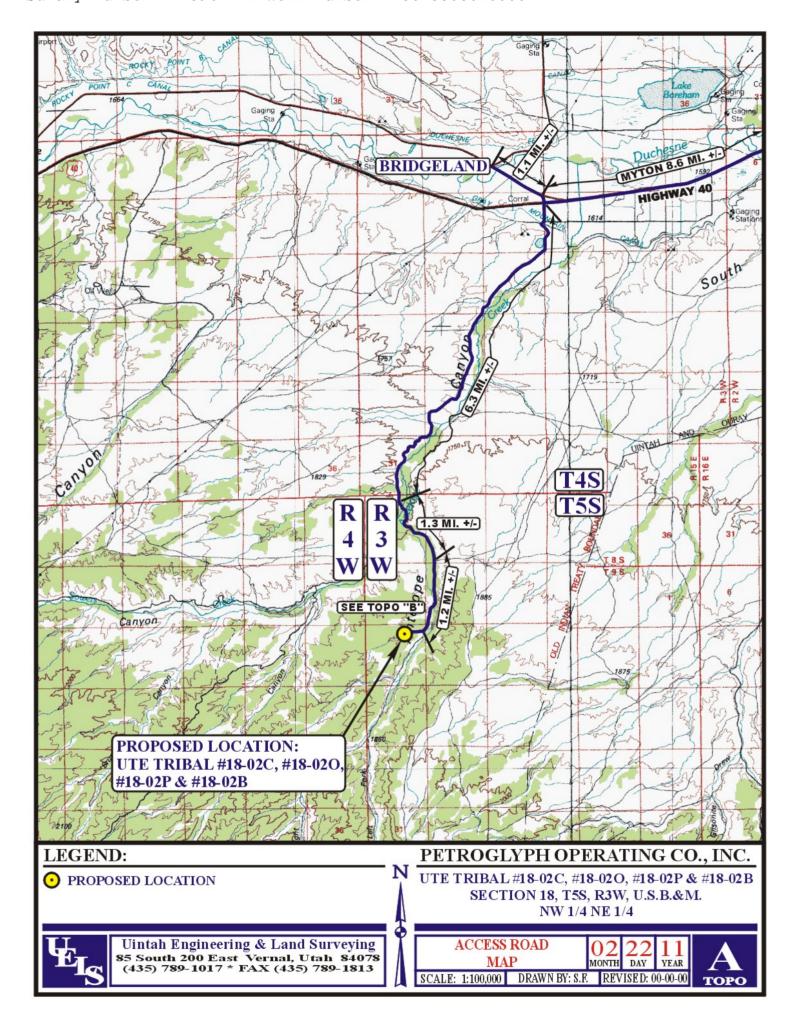
APPLICANT		

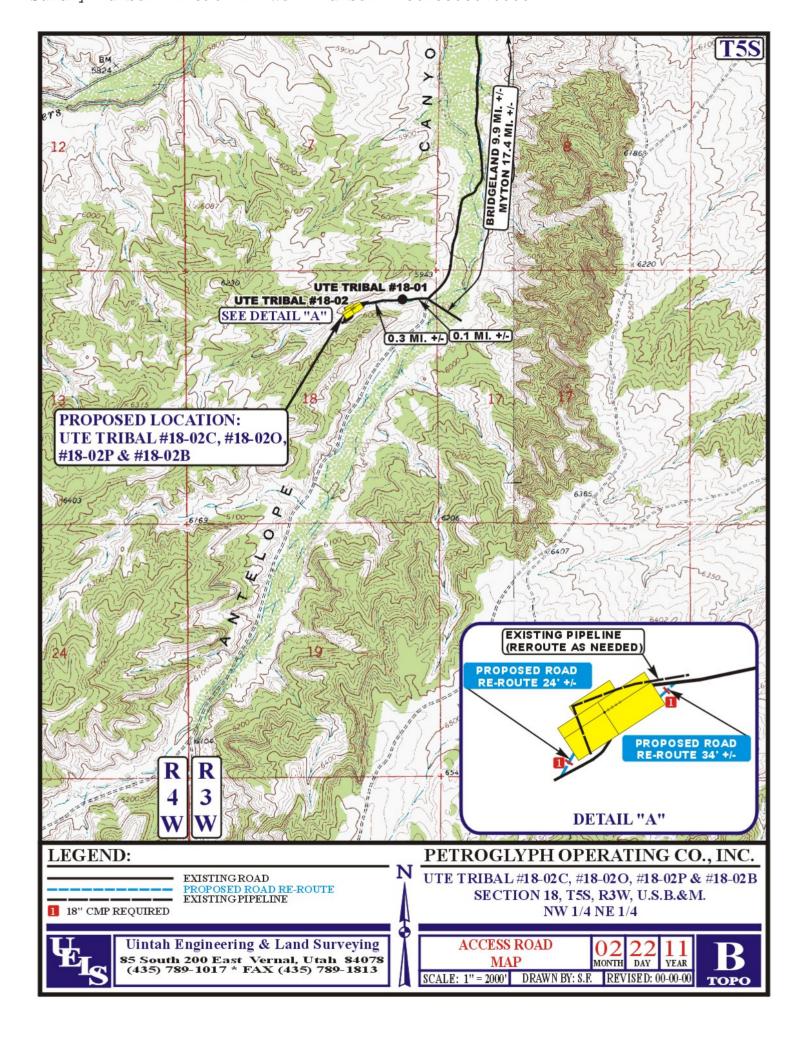
REGISTERED LANDY REGISTRATION NO.

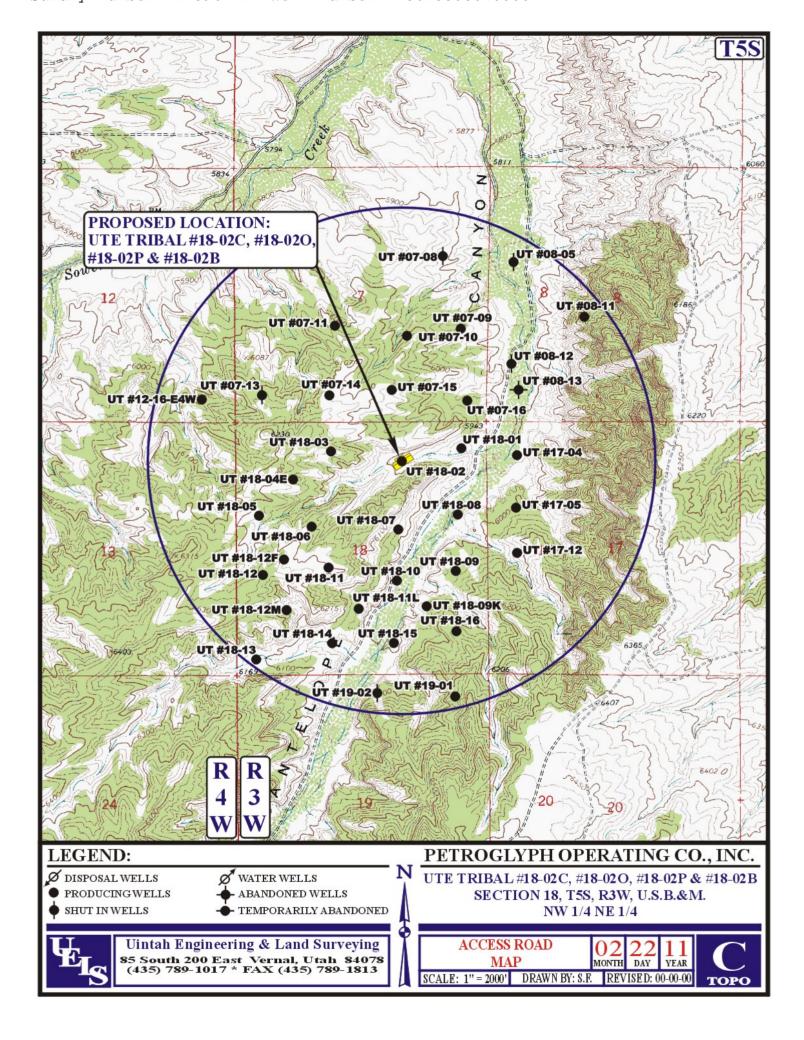
VERNAL, UTAH

1971AHOF3<u>U</u>

TITLE RECEIVED: Apr. 03, 2012







	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE	CES	FORM 9
l	DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3513
	RY NOTICES AND REPORTS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
Do not use this form for pro current bottom-hole depth, FOR PERMIT TO DRILL form	posals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.	deepen existing wells below intal laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: UTE TRIBAL 18-02O
2. NAME OF OPERATOR: PETROGLYPH OPERATING O	;o		9. API NUMBER: 43013508020000
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500) , Bosie, ID, 83703 20	PHONE NUMBER: 08 685-7674 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0791 FNL 1731 FEL			COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 18 Township: 05.0S Range: 03.0W Mer	ridian: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
✓ NOTICE OF INTENT	ACIDIZE	ALTER CASING	CASING REPAIR
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
4/23/2012	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	✓ FRACTURE TREAT	☐ NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all pertinent details including dates, o	depths, volumes, etc.
On 4/23/2012 Petri following in Gree 4102'-04', B7.	oglyph Operating intends to n River Formation: B5: 4051 3: 4211'-20' & 4226'-28', C:	perforate and frac the l'-64', B6: 4090'-99' & 3.2: 4529'-35', C4:	Accepted by the Utah Division of Oil, Gas and Mining
	0'-32' & 4736'-38', D7: 517(Date: April 19, 2012
	I E7: 5822'-26' & 5840'-47'. uid and 20/40 mesh sand. V	•	By: Dod K Dunt
	determined and will be report		by. Die Comp
,	•		
NAME (PLEASE PRINT)	PHONE NUMB	ER TITLE	
Rodrigo Jurado	435 722-5302	Regulatory & Compliance S	рс
SIGNATURE N/A		DATE 4/18/2012	

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES		FORM 9
DIVISION OF OIL, GAS AND MINING		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3513
SUNDRY NOTICES AND REPORTS ON		6. IF INDIAN, ALLOTTEE OR TRIBE NAME. Ute Indian Tribe
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current botton drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for su	m-hole depth, reenter plugged wells, or to ich proposals.	7. UNIT OF CA AGREEMENT NAME: 14-20-H62-4650
OIL WELL GAS WELL OTHER		8. WELL NAME and NUMBER: Ute Tribal 18-020
NAME OF OPERATOR: Petroglyph Operating Company Inc.		9. API NUMBER: 4301350802
3. ADDRESS OF OPERATOR:	PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066	(435) 722-2531	Antelope Creek
FOOTAGES AT SURFACE: 791' FNL, 1731' FEL		COUNTY: Duchesne
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNE 18 5S 3W		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NAT	TURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
(Substitute Interest)	EEPEN	REPERFORATE CURRENT FORMATION
Approximate date work will start:	RACTURE TREAT	SIDETRACK TO REPAIR WELL
F/4/2042	EW CONSTRUCTION PERATOR CHANGE	TEMPORARILY ABANDON
	LUG AND ABANDON	UBING REPAIR VENT OR FLARE
SUBSECUENT REPORT	.UG BACK	WATER DISPOSAL
	RODUCTION (START/RESUME)	WATER SHUT-OFF
COMMUNICIPATION	ECLAMATION OF WELL SITE	OTHER:
CONVERT WELL TYPE RE	ECOMPLETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent d	letails including dates, depths, volumes	, etc.
The first date of production for this well was 05/04/2012.		
	•	
•		· .
	R	ECEIVED
		MAY 0 8 2012
	OIV. OF	OIL, GAS & MINING
		,
NAME (PLEASE PRINT) Rodrigo Jurado	Regulatory Complia	ance Spc
SIGNATURE	DATE 5/8/2012	

(This space for State use only)

	STATE OF UTAH		FORM 9					
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ		5.LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3513					
SUNDR	RY NOTICES AND REPORTS ON	I WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE					
	oposals to drill new wells, significantly dee reenter plugged wells, or to drill horizonta n for such proposals.		7.UNIT or CA AGREEMENT NAME: ANTELOPE CREEK					
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: UTE TRIBAL 18-02O					
2. NAME OF OPERATOR: PETROGLYPH OPERATING O	xo		9. API NUMBER: 43013508020000					
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500		IONE NUMBER: 85-7674 Ext	9. FIELD and POOL or WILDCAT: ANTELOPE CREEK					
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0791 FNL 1731 FEL			COUNTY: DUCHESNE					
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 18 Township: 05.0S Range: 03.0W Meridia	n: U	STATE: UTAH					
11. CHEC	K APPROPRIATE BOXES TO INDICATE I	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
	ACIDIZE	ALTER CASING	CASING REPAIR					
☐ NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME					
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN ✓	FRACTURE TREAT	NEW CONSTRUCTION					
5/30/2012								
	☐ OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK					
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION					
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	L TEMPORARY ABANDON					
DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL					
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION					
	WILDCAT WELL DETERMINATION	OTHER	OTHER:					
12. DESCRIBE PROPOSED OR		ertinent details including dates.	lepths, volumes, etc.					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. On 4/20/2012 Petroglyph Operating began completion operations on the above referenced well. We frac'd the following zones: 1: 5822-5847 w/ 505 Bbls of fluid containing 20,300#'s of sand 2: 5635-5711 w/ 457 Bbls of fluid containing 13,430#'s of sand 3: 5170-5181 w/ 389 Bbls of fluid containing 30,200#'s of sand 4: 4720-4738 w/ 278 Bbls of fluid containing 30,000#'s of sand 5: 4529-4588 w/ 373 Bbls of fluid containing 30,200#'s of sand 6: 4211-4228 w/ 269 Bbls of fluid containing 25,200#'s of sand 7: 4051-4104 w/ 552 Bbls of fluid containing 50,200#'s of sand Halliburton 8K Composite Plugs set @: 5770', 5250', 4900', 4655', 4390', 4160' & 3940'. All plugs were drilled out, well was cleaned out to PBTD, 6154', and well was put to production 5/30/2012. Fluid: Delta 140 15# gelled fluid containing 20/40 mesh sand Perfs: 3 1/8" guns, 22.7 gram charges, 0.42" EHD, 23.54" TTP @4spf @120* phsd								
Rodrigo Jurado	435 722-5302	Regulatory & Compliance S	рс					
SIGNATURE N/A		DATE 6/18/2012						

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

NDED REPORT	Ш	FORM 8
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5.	LEASE DESIGNATION AND SERIAL NUMBER:	
	14-20-H62-3513	

		_			O.L.,	0, 10							14-2	0-H6	2-35	13			
WEL	L COM	PLET	ION C	OR R	ECO	MPL	ETIC	N RI	EPOR	TANE	LOG	6.			ottee (n Trib		BE NAME		
1a. TYPE OF WELL		OIL	LL 🗾	GA WE	S C]	DRY		OTHE	R		7.			REEMEN 32-46		IE		
b. TYPE OF WORK	K: HORIZ. LATS.	l PE	EP-	RE- DIFF. OTHER											nd NUME		/		
2. NAME OF OPERA	ATOR:						T.EOTT.		01178			9.	API NUN						
Petroglyph 3. ADDRESS OF OF		ing Cor	npany,	, Inc.						PHONE	NUMBER:	10		13508	802 OL, OR 1	WILDC.	AT		
P.O. Box 60		C	TY Roo	sevelt		STATE	UT	ZIP 840	066		5) 722-253				Cree				
4. LOCATION OF W AT SURFACE:	788' FN	L, 1 720										4					SHIP, RANGI		
AT TOP PRODU	ICING INTERV	AL REPOR	TED BELC	ow: 19	4' FN	IL, 22	83' FE	L			i engania entre de la composición de l La composición de la								
AT TOTAL DEPT	1.01 500 0.000		99' FEL		HU!	by 1	KW	1					Duch	esne				UTA	АН
2/23/2012	D: 1	5. DATE T. 3/22/2		ED: 1		COMPL 0/2012		,	ABANDONE	ED 🔲	READY TO PROD	DUCE 🔽			IONS (DI 1 RKI		, RT, GL):		
18. TOTAL DEPTH:	^{MD} 6,2 TVD 6.1		19	. PLUG B	ACK T.D		6,154 6,022		20. IF N	ULTIPLE CO	OMPLETIONS, HO	W MANY?		EPTH B PLUG S	BRIDGE SET:	MD TVE)		
22. TYPE ELECTRIC	112-1412	10.70 (7.11)	ICAL LOGS	S RUN (Su	bmit cop		-			23.			<u> </u>						
CBL, Boreh	ole Volur	me Plot	, Spec	tral De	ensity	Dual	Space	ed Neu	utron ×	WAS DST	L CORED? RUN? NAL SURVEY?			YES YES YES		(Subr	nit analysis) nit report) nit copy)		
24. CASING AND L	INER RECOR	D (Report a	ıll strings :	set in well)														
HOLE SIZE	SIZE/GRA	ADE	WEIGHT (#	#/ft.)	TOP (MD)	вотто	M (MD)		EMENTER PTH	CEMENT TYPE NO. OF SACKS		URRY ME (BBL) CE	EMENT 1	TOP **	AMOUNT	PUL	LED
20"	14" }	∢- 55	63		0)	5	4							0		cond	luc	tor
12.25"	8.625"	J-55	24		0	1		22			G 3		94		0				
7.875"	5.5"	J-55	15.5	5	0		6,2	238	<u> </u>		G 88	35 2	273	_	0 CE	3L			
									ļ					-					
														$+\!\!\!-$					
25. TUBING RECOI	PB						L		<u> </u>								<u> </u>		
SIZE	_	SET (MD)	PACKE	R SET (ME	0)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	SIZE	П	DEPT	H SET (MD)	PACKER S	SET ((MD)
2.875"		384							,						·			`	
26. PRODUCING IN	ITERVALS									27. PERFO	RATION RECORD	· · · · · · · · · · · · · · · · · · ·							
FORMATION	NAME	TOP (MD)	BOTTOM	(MD)		(TVD)	вотто	M (TVD)	INTERVA	L (Top/Bot - MD)	SIZE		OLES			RATION STA	TUS	
(A) Green Riv	ver	4,0	51	5,84	1 7	3,9	939	5,7	'16	4,051	4,228			40		<u>Z</u>	Squeezed		
(B)								ļ		4,529	4,738			04	1	<u>Z</u>	Squeezed	ᆜ	
(C)		ļ								5,170	5,18		_	14		<u> </u>	Squeezed	<u> </u>	
(D)									[5,635	5,847	0.42	' 1	16	Open	✓	Squeezed	Ц	
28. ACID, FRACTU		ENT, CEME	NT SQUEE	ZE, ETC.															
	INTERVAL		004 5		11 4	10.15	,, ,,				YPE OF MATERIA								
4,051-4,228											0/40 mesh								
4,529-5,181											20/40 mes								
5,635-5,847 29. ENCLOSED AT			902 B	טוא טפ	ila 14	40 154	# gene	a nuic	1. 33,7	30# \$ 20	0/40 mesh	sanu				0. WEL	L STATUS:		
Z ELECT	RICAL/MECH	ANICAL LO		CEMENT V	ERIFICA	ATION		GEOLOGI CORE AN	IC REPORT		DST REPORT OTHER: <u>UDO</u>		rm 7		VEY		POW	<i>'</i>	
												KH	CEI	٧٢	J				

(CONTINUED ON BACK)

JUL 0 2 2012

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 5/4/2012		TEST DATE: 6/15/2012	2	HOURS TESTER	D: 24	TEST PRODUCTION RATES: →	OIL – BBL: 67	GAS – MCF: 52	WATER - BBL: 112	PROD. METHOD: Rod Pump
CHOKE SIZE: 32/64	TBG. PRESS.	CSG. PRESS. 190	API GRAVITY 38.30	BTU - GAS		24 HR PRODUCTION RATES: →		GAS - MCF: 52	WATER - BBL: 112	INTERVAL STATUS Open
				INT	ERVAL B (As sho	wn in item #26)			_	
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTER	D:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL BBL:	GAS MCF:	WATER - BBL:	INTERVAL STATUS
				INT	ERVAL C (As sho	wn in item #26)		<u> </u>	-	<u> </u>
DATE FIRST PR	ODUCED:	TEST DATE:		HOURS TESTER	D:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OfL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS
			•	INT	ERVAL D (As sho	wn in item #26)		<u> </u>		
DATE FIRST PRO	ODUCED:	TEST DATE:		HOURS TESTER	D:	TEST PRODUCTION RATES: →	OIL BBL:	GAS - MCF:	WATER BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS ~ MCF:	WATER - BBL:	INTERVAL STATUS

JMMARY OF PORO	US ZONES (Includ	le Aquifers):		34. FORMATION (Log) MARKERS:	
		ents thereof: Cored inter and shut-in pressures an	vals and all drill-stem tests, including depth interval d recoveries.		
Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Trona	2,576
	1			Mahogany	2,750
				Garden Gulch	3,480
				B Marker	3,896
		i		X Marker	4,400
]		Y Marker	4,437
				Douglas Creek	4,547
				B Lime	4,937
				Castle Peak	5,500
				Basal Carb	5,914

35. ADDITIONAL REMARKS (Include plugging procedure)

All perf and frac information is condensed. Please see NOI and Subsequent Frac Sundry for detailed record.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.									
NAME (PLEASE PRINT) Rodrigo Jurado	TITLE Regulatory Compliance Sp	pecialist							
OLAI									
SIGNATURE SIGNATURE	DATE 6/21/2012								

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- * ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- ** ITEM 24: Cement Top -- Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to:

Utah Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

	-	LFORTO	VVAILI	LINCOON	LIVE		TRING DRILLING	
Well name and	number: Ute	Tribal 18-02O						
API number: 43	301350802							
Well Location: 0	QQ <u>NWNE</u> Se	ction <u>18</u> T	ownship <u>5</u>	SRange	3W	_ Cour	nty Duchesne	
Well operator:					_			
Address:	P.O. Box 607				_			
<u>!</u>	city Roosevelt	<u> </u>	_{state} UT	zip 84066	_	Phe	one: (435) 722-2531	
Drilling contract	or: Craig's Ro	oustabout Serv	rice		_			
	5053 South 4							
9	_{city} Vernal		state UT	_{zip} 84078	_	Phe	one: (435) 781-1366	
Water encounte	ered (attach ac			-				
Г	DEP		T	VOLUME		<u> </u>	QUALITY	
	FROM	то	(FL	OW RATE OR	HEAD)		(FRESH OR SALTY)	
	26	37		0			Fresh	
		· · · · · · · · · · · · · · · · · · ·						
-		<u> </u>						
<u> </u>								
_								
L			<u> </u>					i
Formation tops:	1			2			3	
(Top to Bottom)	4							
	7						9	
	10			11			12	
If an analysis ha	as been made	of the water e	ncountere	d, please att	ach a c	ору о	f the report to this form.	
I hereby certify that	-	-	e to the best	or my knowled		D	ulatami Camarliania - Caracialiat	
NAME (PLEASE PRINT	Roarigo Jura	300			TITLE		ulatory Compliance Specialist	
SIGNATURE	The file			 	DATE	6/21/	/2012	
(5/2000)								

multi-chem^a

A HALLIBURTON SERVICE

Water Analysis Report

Production Company: PETROGLYPH Sales Rep: James Patry
Well Name: 18-02-0 Lab Tech: Gary Peterson
Sample Point: Surface Rig

Sample Date: 2/29/2012 Sample ID: WA-207934 Scaling potential predicted using ScaleSoftPitzer from Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics									
Test Date:	3/1/2012	Cations	mg/L	Anions	mg/L						
System Temperature 1 (°F);	300.00	Sodium (Na):	282.06	Chloride (Cl):	1400.00						
System Pressure 1 (psig):	3000.00	Potassium (K):	113.00	Sulfate (SO ₄):	2120.00						
System Temperature 2 (°F):	60.00	Magnesium (Mg):	915.00	Bicarbonate (HCO3):	1220.00						
System Pressure 2 (psig):	14.70	Calcium (Ca):	752.00	Carbonate (CO ₃):	0.00						
Calculated Density (g/ml):	1.00	Strontium (Sr):	0.00	Acetic Acid (CH3COO)	0.00						
pH:	6.80	Barium (Ba):	0.12	Propionic Acid (C2H5COO)	0.00						
Calculated TDS (mg/L):	6807.30	Iron (Fe):	4.50	Butanoic Acid (C3H7COO)	0.00						
CO2 in Gas (%):	0.00	Zinc (Zn):	0.02	Isobutyric Acid ((CH3)2CHCOO)	0.00						
Dissolved CO2 (mg/L)):	3.96	Lead (Pb):	0.20	Fluoride (F):	0.00						
H ₂ S in Gas (%):	0.00	Ammonia NH3:	0.00	Bromine (Br):	0.00						
H2S in Water (mg/L):	0.00	Manganese (Mn):	0.40	Silica (SiO2):	0.00						
Motoc			-								

Notes:

(PTB = Pounds per Thousand Barrels)

Temp (°F) PSI	Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO4 2H2O		Celestite SrSO4		Halite NaCl		Zinc Sulfide		
	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	РТВ	SI	РТВ
60	14	0.75	136.19	1.13	0.07	0.00	0.00	0.29	1.57	0.03	48.33	0.00	0.00	0.00	0.00	0.00	0.00
86	346	0.79	141.08	0.84	0.06	0.00	0.00	0.43	2.03	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00
113	678	0.91	160.02	0.63	0.06	0.00	0.00	0.63	2.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	1009	1.04	180.04	0.48	0.05	0.00	0.00	0.83	2.78	0.02	30.70	0.00	0.00	0.00	0.00	0.00	0.00
166	1341	1.19	200.09	0.38	0.04	0.00	0.00	1.02	2.95	0.06	86.98	0.00	0.00	0.00	0.00	0.00	0.00
193	1673	1.35	219.46	0.32	0.04	0.00	0.00	1.20	3.06	0.12	158.21	0.00	0.00	0.00	0.00	0.00	0.00
220	2004	1.52	237.69	0.30	0.04	0.00	0.00	1.37	3.13	0.19	235.69	0.00	0.00	0.00	0.00	0.00	0.00
246	2336	1.69	254.51	0:30	0.04	0.00	0.00	1.53	3.17	0.26	312.64	0.00	0.00	0.00	0.00	0.00	0.00
273	2668	1.87	269.76	0.32	0.04	0.00	0.00	1.68	3.20	0.33	384.18	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	2.05	283.37	0.36	0.04	0.00	0.00	1.82	3.22	0.40	447.12	0.00	0.00	0.00	0.00	0.00	0.00

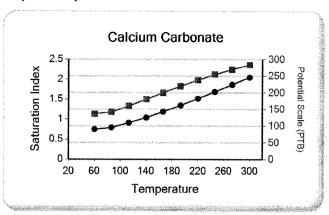
Temp (°F) PSI	Hemihydrate CaSO4~0.5H2 O		Anhydrate CaSO4		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate		
	PSI	SI	РТВ	SI	РТВ	SI	РТВ	SI	PTB	SI	PTB	SI	PTB	SI	РТВ	SI	PTB
60	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	346	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	678	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	1009	0.00	0.00	0.03	34.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	1341	0.00	0.00	0.20	202.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	1673	0.00	0.00	0.40	354.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
220	2004	0.01	12.46	0.60	483.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
246	2336	0.24	247.85	0.82	588.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
273	2668	0.48	434.66	1.04	670.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300	3000	0.72	577.92	1.26	733.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

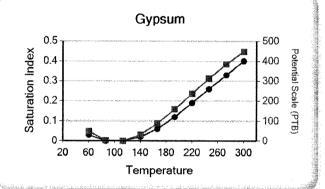
These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate

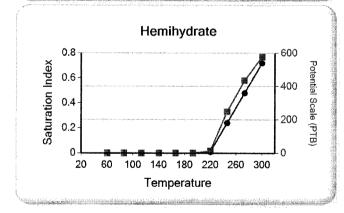
multi-chem

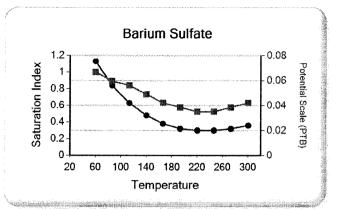
LHAITIRDRTON SERVICE

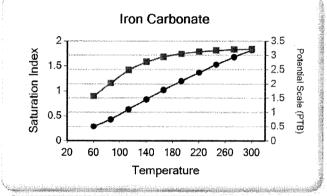
These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Barium Sulfate Iron Carbonate Gypsum Hemihydrate Anhydrate

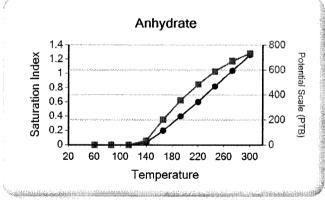












Ethics



Job Number: UT121001

Company: Petroglyph

Lease/Well: Ute Tribal 18-02O

Location: Duchesne county

Rig Name: Aztec 673

RKB: 14.5

G.L. or M.S.L.: MSL

State/Country: Utah/USA

Declination: 11.28

Grid: True North

File name: C:\DOCUME~1\HBUSER\DESKTOP\UT12101.SVY

Date/Time: 22-Mar-12 / 13:24

Curve Name: Ute Tribal 18-02O

Payzone Directional

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method Vertical Section Plane 317.25 Vertical Section Referenced to Wellhead Rectangular Coordinates Referenced to Wellhead

Measured Depth	Incl Angle	Drift Direction	True Vertical	N-S	E-W	Vertical Section	C L Distance	Dogleg Severity	
ĖT	Deg	Deg	Depth	FT	FT	FT	FT	Direction Deg	Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Gyro Survey									
100.00	.38	347.08	100.00	.32	07	.29	.33	347.08	.38
Gyro Survey						0	.00	017.00	.00
200.00	.36	348.15	200.00	.95	21	.84	.98	347.42	.02
Gyro Survey					· - ·	.01	.00	047.42	.02
300.00	.51	286.36	299.99	1.39	70	1.50	1.56	333.07	.46
614.00	.35	102.38	613.99	1.57	-1.11	1.91	1.93	324.86	.27
707.00	.97	296.40	706.99	1.86	-1.54	2.44	2.42	200 54	4 44
797.00	3.16	321.31	700.99 796.93	4.14	-1.5 4 -3.77	2.41	2.42	320.51	1.41
889.00	4.54	317.01	888.72	8.78		5.60	5.60	317.68	2.57
981.00	5.63	316.61	980.35		-7.84	11.77	11.77	318.25	1.53
1074.00	6.90			14.72	-13.42	19.92	19.92	317.65	1.19
1074.00	0.90	316.00	1072.80	22.06	-20.44	30.07	30.07	317.19	1.37

Measured	Incl	Drift Divertion	True	N O	F- 14/	Vertical		OSURE	Dogleg
Depth FT	Angle Deg	Direction Deg	Vertical Depth	N-S FT	E-W FT	Section FT	Distance FT	Direction Deg	Severity Deg/100
1167.00	7.91	318.81	1165.02	30.89	-28.53	42.05	42.05	317.28	1.15
1260.00	9.19	316.39	1256.98	41.09	-37.87	55.88	55.88	317.33	1.43
1353.00	9.71	313.67	1348.72	51.88	-48.66	71.13	71.13	316.83	.74
1446.00 1539.00	10.28 10.81	313.76	1440.31	63.03	-60.33	87.24	87.25	316.26	.61
1539.00	10.81	313.32	1531.74	74.76	-72.67	104.22	104.26	315.81	.58
1632.00	11.51	308.70	1622.98	86.54	-86.25	122.10	122.19	315.10	1.22
1725.00	12.17	309.71	1714.00	98.61	-101.04	140.99	141.18	314.30	.74
1818.00	12.57	311.51	1804.84	111.58	-116.16	160.78	161.06	313.85	.60
1911.00	13.84	314.02	1895.38	126.01	-131.73	181.96	182.30	313.73	1.50
2004.00	14.59	313.62	1985.54	141.82	-148.21	204.75	205.14	313.74	.81
2097.00	14.59	316.35	2075.54	158.38	-164.78	228.15	228.55	313.87	.74
2190.00	15.10	319.27	2165.43	176.04	-180.77	251.97	252.32	314.24	.74 .97
2283.00	15.56	319.69	2255.12	194.73	-196.74	276.54	276.81	314.71	.51
2376.00	16.53	319.34	2344.50	214.28	-213.43	302.22	302.44	315.11	1.05
2469.00	17.31	317.32	2433.48	234.48	-231.43	329.28	329.46	315.38	1.05
		· · · · · · ·	_,,,,,,	20 11 10	201.10	020.20	020.40	010.00	1.00
2562.00	18.37	317.32	2522.00	255.43	-250.75	357.77	357.93	315.53	1.14
2655.00	19.07	318.37	2610.08	277.56	-270.77	387.62	387.76	315.71	.84
2749.00	17.75	315.56	2699.27	299.27	-291.01	417.30	417.43	315.80	1.69
2842.00	19.13	316.91	2787.49	320.52	-311.34	446.71	446.84	315.83	1.55
2935.00	18.54	320.00	2875.52	342.98	-331.26	476.71	476.83	316.00	1.25
3028.00	19.38	321.18	2963.47	366.32	-350.44	506.88	506.95	316.27	.99
3122.00	20.35	321.31	3051.88	391.23	-370.43	538.74	538.78	316.56	.99 1.03
3215.00	20.37	320.52	3139.07	416.35	-390.83	571.03	571.05	316.81	.30
3308.00	19.34	318.81	3226.54	440.43	-411.26	602.58	602.59	316.96	.30 1.27
3400.00	19.25	318.72	3313.37	463.29	-431.30	632.97	632.98	317.05	.10
0.00.00	10.20	010.72	0010.07	400.20	-431.30	032.97	032.90	317.05	.10
3494.00	17.89	316.87	3402.47	485.47	-451.40	662.90	662.91	317.08	1.58
3587.00	16.83	315.34	3491.24	505.48	-470.63	690.64	690.65	317.04	1.24
3680.00	16.52	317.84	3580.33	524.85	-488.96	717.32	717.33	317.03	.84
3773.00	15.47	314.99	3669.73	543.42	-506.61	742.94	742.94	317.01	1.41
3866.00	15.17	315.17	3759.42	560.82	-523.96	767.49	767.50	316.95	.33
			- · · · · · ·		020.00		707.00	010.00	.00
3960.00	14.63	315.94	3850.26	578.08	-540.89	791.65	791.66	316.90	.61
4053.00	13.23	313.40	3940.52	593.83	-556.79	814.01	814.03	316.84	1.64

Page 2
Ute Tribal 18-02O File: C:\DOCUME~1\HBUSER\DESKTOP\UT12101.SVY

Measured	Incl	Drift	True			Vertical	CL	OSURE	Dogleg
Depth	Angle	Direction	Vertical	N-S	E-W	Section	Distance	Direction	Severity
FT	Deg	Deg	Depth	FT	FT	FT	FT	Deg	Deg/100
4146.00	13.10	313.45	4031.08	608.39	-572.17	835.15	835.18	316.76	.14
4239.00	12.83	313.84	4121.71	622.79	-587.27	855.97	856.01	316.68	.31
4332.00	11.78	311.78	4212.57	636.27	-601.80	875.73	875.78	316.59	1.22
4425.00	10.81	310.86	4303.77	648.30	-615.47	893.84	893.92	316.49	1.06
4518.00	9.89	310.50	4395.26	659.19	-628.14	910.44	910.55	316.38	.99
4611.00	10.24	316.22	4486.83	670.35	-639.94	926.64	926.76	316.33	1.14
4704.00	9.33	318.49	4578.47	681.96	-650.65	942.44	942.56	316.35	1.06
4796.00	8.04	318.59	4669.42	692.37	-659.85	956.33	956.44	316.38	1.40
4889.00	7.21	319.20	4761.59	701.67	-667.97	968.67	968.77	316.41	.90
4982.00	6.60	318.50	4853.92	710.09	-675.32	979.84	979.94	316.44	.66
5075.00	6.72	321.53	4946.29	718.35	-682.25	990.61	990.70	316.48	.40
5168.00	6.94	324.26	5038.63	727.17	-688.91	1001.61	1001.69	316.55	.42
5261.00	5.49	329.97	5131.08	735.58	-694.42	1011.53	1011.59	316.65	1.69
5355.00	4.35	322.28	5224.74	742.30	-698.85	1019.47	1019.51	316.73	1.40
5448.00	4.44	313.27	5317.46	747.55	-703.63	1026.57	1026.61	316.73	.75
5541.00	3.91	302.15	5410.22	751.71	-708.94	1033.23	1033,28	316.68	1.04
5634.00	3.97	299.69	5503.00	754.99	-714.42	1039.36	1039.43	316.58	.19
5727.00	3.47	293.63	5595.80	757.71	-719.80	1045.00	1045.10	316.47	.68
5820.00	3.16	287.70	5688.65	759.62	-724.82	1049.81	1049.94	316.34	.50
5913.00	3.12	296.70	5781.51	761.54	-729.52	1054.41	1054.58	316.23	.53
6006.00	2.70	286.64	5874.39	763.30	-733.88	1058.67	1058.87	316.13	.71
6099.00	2.33	283.04	5967.30	764.36	-737.82	1062.12	1062.36	316.01	.43
6184.00	2.00	278.20	6052.24	764.96	-740.97	1064.70	1064.99	315.91	.44
Project to Bit							1001100	010.01	٠٦٦
6247.00	2.00	278.20	6115.20	765.27	-743.15	1066.40	1066.73	315.84	.00



Job Number: SVGJ-120277

Company: Petroglyph

Lease/Well: Ute Tribal 18-02O

Location: Duchesne County, Utah

Rig Name: Casedhole Solutions

RKB: 0'

G.L. or M.S.L.: GL

State/Country: Utah/USA

Declination: 11.30°

Grid: East To True

File name: F:\2012SU~1\PETROG~1\LORENZ\UTE\18-02O.SVY

Date/Time: 05-Mar-12 / 13:22

Curve Name: Surface - 391' M.D. (Rate Gyro)

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane .00

Vertical Section Referenced to Wellhead

Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from **STIC** MD to **391** MD is, to the best of our knowledge a true and accurate account of the well bore.

MS Energy Services

3512

Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L (Distance FT	O S U R E Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	00	00
100.00	.38	347.08	100.00	.32	07	.32	.33	347.08	.38
200.00	.36	348.15	200.00	.95	21	.95	.98	347 42	02
300.00	.51	286.36	299.99	1.39	70	1.39	1.56	333.07	.46
Last Survey	Depth Record	led		The second secon		The state of the s	A CONTRACTOR OF THE CONTRACTOR		
391.00	.54	261.74	390.99	1.44	-1.52	1.44	2.09	313.49	.25